



# UNITED STATES PATENT AND TRADEMARK OFFICE

*Hu*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,513	10/17/2003	Amy E. Battles	200209018-1	1997

22879 7590 08/10/2006

HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

WOODS, ERIC V

ART UNIT PAPER NUMBER

2628

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/688,513

Applicant(s)

BATTLES, AMY E.

Examiner

Eric Woods

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-18, 21-24 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-18, 21-24 and 26-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments -- see Remarks pages 8-15 and claim amendments, pages 2-7, filed 22 May 2006 -- with respect to the rejection of various claims have been fully considered and are persuasive.

The rejection of claims 1-4, 7-18, 20-24, and 26-28 under 35 USC 103(a) has been withdrawn in view of applicant's amendments to the claims.

However, upon further consideration, new grounds of rejection against the claims in view of various references are set forth below.

### ***Claim Objections***

Claim 29 is objected to because it is unduly confusing. There are three separate "means for" in the last clause. Specifically, the phrase "means for triggering the means for ..." is very awkward and confusing. Applicant is allowed to use the same term ("means") to have different meanings within one claim, but not on the same line. Please change to "triggering means" or the like. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 7-8, 22-23, and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ojima et al (US PGPub 2003/0133025 A1).

As to claim 1,

A digital camera, comprising: (Ojima, Abstract, Figure 1, [0008-0012], explained in [0019-0021])

-An image playback system of the digital camera that presents a base representation of an image, wherein magnification logic responsive to a magnification step is applied to image information used to generate a modified representation of the image resulting from at least a zoom operation; (Ojima Figures 3(a) and 4(a), where the base representation is presented to the user first – see box 42 on the right showing the display area ratio, which is at 1X, that is, normal viewing and size [0034-0035, 0036 and 0038 particularly]. Magnification logic is present in the camera [0022-0026, 0039, and the like], where the zoom indicator box or cross is shown on the display of the digital camera, as in Figures 3(a)-3(d) and 4(a)-4(d). Next, the base representation is shown first, as in Figure 2, where steps S102 and S104 can be skipped if the user has not designated a zoom ratio and the like. The important thing is that step S105 must occur,

Art Unit: 2628

that is, the zoom ratio(s) are displayed on the sub-LCD (area 42, Figures 3(a)-4(d)), and at that time the base zoom ratio of the display is still one). The user then displays the marking box or cross, and then changes the display ratio to actually show the region in question –as in Figures 3(d) and 4(d), so that it occupies the full screen [0034], and the intermediate steps, where the user increases the display ratio to be larger and focus on that specific region. See particularly [0027], where it is specified that the digital zoom function starts as a base image and goes to a magnified image)

-A magnification control including a zoom in switch and a zoom out switch to effect respective zoom in and zoom out operations on a representation of the image to generate the modified representation; (Ojima clearly has a magnification control – see Figure 1 – element 33 – operation panel [0019], [0025] – “The operation panel 33 can include ... a zooming button, a cross-shape button, etc...” where clearly this would constitute a ‘zoom in’ and ‘zoom out’ switch, since it specifically causes the zoom ratio to increase or decrease, as in [0027-0029])

-A position control including an up switch, a down switch, a left switch, and a right switch to effect respective up, down, left, and right pan operations on a representation of the image to generate the modified representation; and (Ojima has a cross-shape button on the operation panel 33 [0029], where this button is operable to move the marking area around the base image, and the operator can move up and down, as in [0030], and the user can change the zoom ratio – specifically, see [0034], where it is specified that when the marked area zoom is the same as the display zoom, the entire

Art Unit: 2628

marked area takes up the entire LCD, such that any operations that pan the marked area will also pan the underlying image as required)

-Logic for identifying that portion of the image information responsible for the modified representation, wherein the logic is responsive to a transfer control and automatically presents visible indicia on the base representation to demark a select portion of the image information that is transferred as image information corresponding to the modified representation. (Ojima clearly shows the marked portion on the display, as in Figures 3(a)-3(d) and the like, where the entire purpose of the Ojima is to allow the user to see the position and range of the marking area where the digital zoom operation will be executed – [0030]. Clearly, the system will show the marking area on the base image as soon as the display area zoom is returned to a factor of one, so that the user can perceive the position and range of the marking area. The system of Ojima automatically moves the visible indicia of the box as the user pans it and as the user moves about the image.)

Ojima teaches most of the limitations of the above claim. It is noted that the older version of claim 1 contained the modifier 'user-preferred' to the terms 'magnification step,' which clearly illustrates that it is contemplated for the user to control such a magnification step. Clearly, in Ojima the user does control the magnification step so that the user can zoom in to the specific portion of the image desired. Ojima consistently shows the visible indicia around the zoomed region (e.g. either the cross or the box, preferably the box, as in Figures 3(a)-(d)). Therefore, as in Figure 2, the user would cause the display ratio to increase so that the marked region

could be examined, and then cause the zoomed region to return to normal size whilst retaining the marked location, so that the system of Ojima would allow the user to see the position and range of the marking area where the zoom was executed [0030]. It would have been obvious to one of ordinary skill in the art to modify Ojima to allow the user to instantly view the contents of the marked region to examine them without having to utilize the intermediate zooms. Clearly, Ojima utilizes discrete zoom steps, as in Figures 3(a)-3(d), where specific zoom factors are shown that happen to be powers of two, or at least strongly suggests this to be case, where it would have been obvious to use such discrete zoom levels, as all of the various ones represented in Figures 3(a)-4(d) clearly are discrete levels, where the camera would require fewer settings and program instructions if it only had to handle discrete zoom levels. Note [0047].

As to claim 2, clearly the system of Ojima, as shown in Figure 1, contains a memory 40, which can be a storage device for a compressed color signal (whilst in that instance it is a memory card, but other embodiments are contemplated [0024]). Clearly a memory card would constitute another device, and it is communicatively coupled to said camera, note also [0050], where it is noted that program code can be transferred to the camera via the Internet and that it can be installed on a personal computer, which clearly would suggest to one of ordinary skill in the art that such images can be transferred to a personal computer or the like directly. Clearly, the system of Ojima controls transfers to the memory card the final picture that the user has selected once the shutter button is depressed and released, which transfers the modified representation [0048-0049].

As to claim 3, in [0027], the normal ('mere') digital zoom operation normally zooms the midpoint of the image shown on the LCD to the user, where the reference utilizes discrete zoom steps.

As to claim 7, the system of Ojima only captures the portion of the image that is within the marked region – see [0047-0048], where once the area is selected it is captured and transferred to the memory 40 [0028].

As to claim 8, Ojima has a shutter / aperture system 11 (see Figure 1), described in [0019] and [0048]. It also has CCD 34 as part of image capture / lens system 1, which serves as an image acquisition system, where lenses 10 (12 and 18) focus light upon such image capture means. This clearly constitutes receiving light, and acquiring and indexing it to show it to the user. The shutter triggers the system to acquire and index information as recited in the claim, once the image playback means are active, as noted in the rejection to claim 1 above.

As to claim 22, the system claim reads upon the means plus function claim precisely.

As to claim 23, see the rejection to claim 2, where the means for transferring is the action the CPU takes after the user depresses and releases the shutter button, where the means for effecting zoom operations are the zoom button(s) on the operator panel 33 in Ojima, and the means for effecting the pan operations is the cross button.

As to claim 26, clearly the means for identifying constantly tracks the region in question in Ojima. However, the means for identifying is responsive to the means for



Art Unit: 2628

effecting a transfer because it causes the selection of the region and transfers only the contents of the selected region within the demarcated box. See the rejection to claim 7.

As to claim 27, this is a duplicate of the rejection to claim 7.

As to claim 28, see the rejection of claim 3, which is incorporated by reference.

As to claim 29, see the rejection to claim 8, which is incorporated by reference – the means for acquiring is the image acquisition system therein, and the means for triggering are the shutter described in that rejection.

Claims 4, 9-11, 13-16, 21, and 24 are rejected under 35 USC 103(a) as unpatentable over Ojima in view of Roman (US PGPub 2004/0250216 A1).

As to claim 9,

Computer-readable medium containing program for making a computer execute the method is a trivially obvious variant of the computer-implemented method, since a computer prima facie requires a program in order to implement a method.

As to claims 9 and 14,

A method for editing image information with a digital camera, comprising:

-Identifying image information; (Ojima allows the user to select, capture, and/or store images for manipulation and/or other things, that comprise obtaining identifying information for an image [0008-0011], Figure 1 for the apparatus, Figure 2 for the method of capturing, where the user points it [0027-0028], and displays it on the LCD monitor 41)

Art Unit: 2628

-Generating a representation of the image information; (Ojima teaches that the light passes through lenses – focus lens 16, zoom lens 12, and the like [0019], where the light is focused on the CCD 34 [0021]. This information is then transmitted to the CPU after being digitized and the like [0021]. This data is then shown to the user on LCD monitor 41, where clearly this constitutes generating a representation of the image information)

-Magnifying the representation using a discrete magnification step proximal to a midpoint of the digital camera's range for digitally magnifying the image information to produce a modified representation of the image information; (Ojima displays the initial representation to the user, once the user starts the process [0027] by pressing a key on the operation panel 33. The zoom initially starts in the middle or midpoint of the shown image, such as [0027], where the central portion is zoomed upon operation of the zoom ('mere' zoom), where the user can also select a portion to zoom in on (Figures 3(a)-4(d))

-Presenting the modified representation of the image information; (The system of Ojima clearly provides the display of the modified representation –see Figures 3(a)-3(d). Ojima Figures 3(a) and 4(a), where the base representation is presented to the user first – see box 42 on the right showing the display area ratio, which is at 1X, that is, normal viewing and size [0034-0035, 0036 and 0038 particularly]. Magnification logic is present in the camera [0022-0026, 0039, and the like], where the zoom indicator box or cross is shown on the display of the digital camera, as in Figures 3(a)-3(d) and 4(a)-4(d). Next, the base representation is shown first, as in Figure 2, where steps S102 and S104 can

be skipped if the user has not designated a zoom ratio and the like. The important thing is that step S105 must occur, that is, the zoom ratio(s) are displayed on the sub-LCD (area 42, Figures 3(a)-4(d)), and at that time the base zoom ratio of the display is still one). The user then displays the marking box or cross, and then changes the display ratio to actually show the region in question –as in Figures 3(d) and 4(d), so that it occupies the full screen [0034], and the intermediate steps, where the user increases the display ratio to be larger and focus on that specific region. See particularly [0027], where it is specified that the digital zoom function starts as a base image and goes to a magnified image)(Roman teaches in [0020-0021] that the user can control the magnification in discrete amounts – see Figures 2 for examples of this)(Any time the user magnifies the image, it presents a new representation of the image)

-Controllably magnifying the modified representation responsive to a magnification control associated with the digital camera; )(Roman utilizes cursor control devices to set the zoom ratio [0019-0021].)

-Controllably panning across the modified representation such that the preferred subject matter is observable in a desired representation; (Ojima has a cross-shape button on the operation panel 33 [0029], where this button is operable to move the marking area around the base image, and the operator can move up and down, as in [0030], and the user can change the zoom ratio – specifically, see [0034], where it is specified that when the marked area zoom is the same as the display zoom, the entire marked area takes up the entire LCD, such that any operations that pan the marked area will also

Art Unit: 2628

pan the underlying image as required)(Roman allows the user to pan across the image by moving the control window [0019-0021])

-Identifying that portion of the image information responsible for the modified representation; and (Ojima automatically tracks the location of the zoomed portion by maintaining the position of the box, which inherently provides automatic tracking for the region, which therefore requires that the portion of the image that is zoomed by recognized)

-Automatically presenting at least one visual indicia on an unmodified representation to demark the portion of the image information identified in the identifying step. (Ojima clearly shows the marked portion on the display, as in Figures 3(a)-3(d) and the like, where the entire purpose of the Ojima is to allow the user to see the position and range of the marking area where the digital zoom operation will be executed – [0030]. Clearly, the system will show the marking area on the base image as soon as the display area zoom is returned to a factor of one, so that the user can perceive the position and range of the marking area. The system of Ojima automatically moves the visible indicia of the box as the user pans it and as the user moves about the image.)(Roman shows such a visual indicia on the control window. Clearly, this constitutes **indicating the portion of the base image responsible for the modified representation.**)

Ojima teaches most of the limitations of the above claim. Ojima does not expressly teach discrete zoom steps, and teaches that the user can move across the image by using the cross key. It is noted that the older version of claim 1 contained the modifier 'user-preferred' to the terms 'magnification step,' which clearly illustrates that it

is contemplated for the user to control such a magnification step. Clearly, in Ojima the user does control the magnification step so that the user can zoom in to the specific portion of the image desired. Ojima consistently shows the visible indicia around the zoomed region (e.g. either the cross or the box, preferably the box, as in Figures 3(a)-(d)). Therefore, as in Figure 2, the user would cause the display ratio to increase so that the marked region could be examined, and then cause the zoomed region to return to normal size whilst retaining the marked location, so that the system of Ojima would allow the user to see the position and range of the marking area where the zoom was executed [0030]. It would have been obvious to one of ordinary skill in the art to modify Ojima to allow the user to instantly view the contents of the marked region to examine them without having to utilize the intermediate zooms. Clearly, Ojima utilizes discrete zoom steps, as in Figures 3(a)-3(d), where specific zoom factors are shown that happen to be powers of two, or at least strongly suggests this to be case, where it would have been obvious to use such discrete zoom levels, as all of the various ones represented in Figures 3(a)-4(d) clearly are discrete levels, where the camera would require fewer settings and program instructions if it only had to handle discrete zoom levels. Note [0047].

Roman teaches the benefit of using discrete zoom levels [0020] and distinctly teaches panning [0025]. These are shown as benefits in [0024], where it allows the user to decrement or increment the zoom by fixed amounts. As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

Art Unit: 2628

modify Ojima in light of Roman to use discrete zoom levels and to allow panning within the image as well as moving (although examiner argues that they are the same thing).

As to claims 4 and 24, it would have been obvious to have discrete zoom levels for the reasons set forth in the above rejection of claim 9, the relevant portions of which are incorporated by reference. Anyway, Ojima obviously increments or decrements the zoom based on the user operation of the zoom button(s) on operator panel 33, where clearly the operation of such successive operations cause the display to zoom in and/or zoom out, where when there are discrete levels of zoom, successive operation of those keys will cause the system to move from one magnification level to the next successive one (in either direction).

As to claims 10 and 15, clearly the system of Ojima, as shown in Figure 1, contains a memory 40, which can be a storage device for a compressed color signal (whilst in that instance it is a memory card, but other embodiments are contemplated [0024]). Clearly a memory card would constitute another device, and it is communicatively coupled to said camera, note also [0050], where it is noted that program code can be transferred to the camera via the Internet and that it can be installed on a personal computer, which clearly would suggest to one of ordinary skill in the art that such images can be transferred to a personal computer or the like directly. Clearly, the system of Ojima controls transfers to the memory card.

As to claim 11, clearly Ojima illustrates that the user can move in and out of the zoomed in region (see Figures 3(a)-4(d) as explained in the rejection to claims 9/14

Art Unit: 2628

above). Roman clearly teaches the incrementing and decrementing of the zoom function by stepped intervals – [0021-0025].

As to claims 13 and 21, clearly the system of Ojima shows the user the captured image on the LCD display 41, where the user can clearly move the camera and the results are shown.

As to claim 15, this is a duplicate of claim 7, the rejection to which is incorporated by reference.

As to claim 16, this claim is a duplication of claim 2, the rejection to which is incorporated by reference.

Claims 12 and 17-18 are rejected under 35 USC 103(a) as unpatentable over Ojima and Roman as applied to claims 9 and 14 above, and further in view of Ejima et al (US PGPub 2003/0103145 A1).

As to claims 12 and 17-18,

Ojima and Roman do not expressly teach selecting a discrete zoom level via a menu, whilst they do teach selecting a discrete zoom menu via the operator panel 33 / controls on a device. Ejima is a digital camera system which has a menu for setting magnification factors, where the user can select a magnification level from such a menu by using selection buttons – see [0098] and [0201]. Obviously, allowing the user to choose a magnification level from a menu instead of having to manually decrement or increment the zoom factor (Roman, Ojima) to the desired level is much faster and more

Art Unit: 2628

efficient for the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ojima /Roman to utilize the menu-driven zoom selection feature in order to facilitate faster user access.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Woods whose telephone number is 571-272-7775. The examiner can normally be reached on M-F 7:30-5:00.



Art Unit: 2628

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric Woods

August 1, 2006

  
ULKA CHAUHAN  
SUPERVISORY PATENT EXAMINER